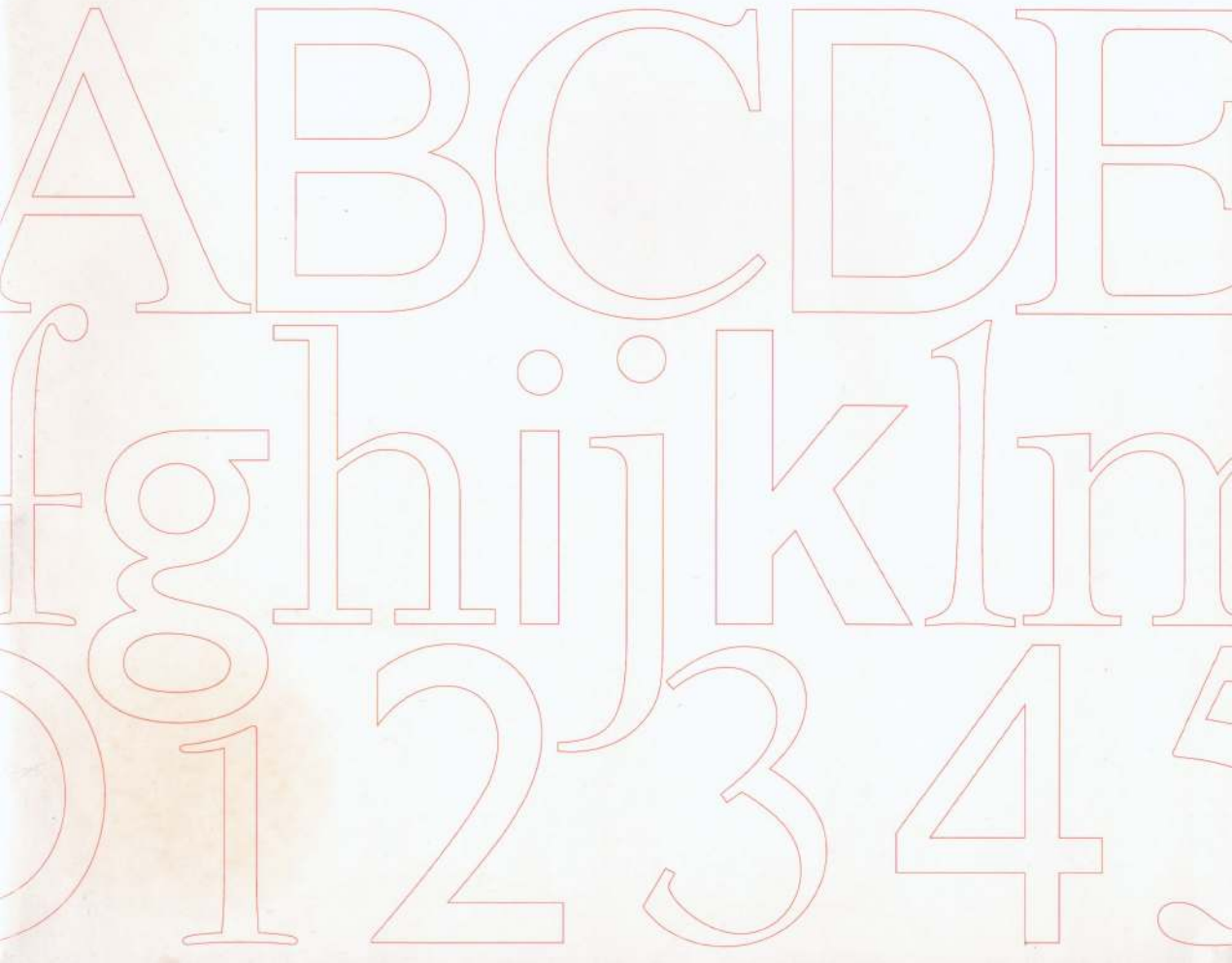
# Getting Started With TrueType™



# What's in This for You?

Apple wants you to get the most out of your printer. That's why we've produced this brochure. It contains information about type, graphics, and technology that will help you produce more effective documents. It doesn't matter whether you write business letters, compile spreadsheets, give presentations, or produce newsletters—if you need to get your words into print, there's something in here for you.

This brochure is organized in four sections. The first section discusses TrueType,™ Apple's powerful new font technology. You'll find out how TrueType can give you great type, at any size, on any printer.

The second section consists of four sample documents. These documents were created using the basic TrueType font set that comes with all Apple™ printers, and demonstrate how type can add impact and structure to your documents.

The third section contains more sophisticated examples, each incorporating graphics and one or more commercially available fonts. You'll see how you can really make your work stand out by adding just a few new fonts to your software library.

The final section is a partial list of TrueType font and software vendors. You can refer to this list when adding to your TrueType font library.

Section 1

# TrueType

This section provides a short explanation of the features and advantages of TrueType fonts.

# What Is TrueType?

TrueType is great type. At any size. On any computer screen. And from any printer. TrueType is a unique font format that guarantees that if your document looks good on screen, it will look even better in print.

The four font families that come with your printer—Times,® Helvetica,® Courier, and Symbol—are TrueType font families. This means that all the characters in the fonts are described to the computer and the printer as outlines. As you type, your Macintosh™ computer uses those outlines to determine what the characters look like on your monitor—the space inside the outlines is displayed in black. Your Macintosh can enlarge, reduce, or stretch TrueType outlines to give you the exact type size or shape you want. And when you output your work, the printer uses the same TrueType outlines to print the characters.

TrueType fonts are stored on your Macintosh, not in your printer. Installing fonts on your computer is easy—just copy the font icon to your Macintosh hard disk. The icon contains everything you need to display and print the font on any screen or printer.

Apple developed the TrueType standard in close cooperation with leading type vendors. The broad industry support for the TrueType standard means you'll be able to mix and match type from different vendors with confidence that all the fonts will work together. TrueType is also completely compatible with all existing Macintosh applications, type formats, and a wide range of output devices, including direct-connect and PostScript® printers, typesetters, and film recorders. This means that you can take advantage of TrueType immediately.

**From Typewriters to Laser Printers**
The printing press mechanized the mass production of written words. But people still needed faster alternatives to handwriting.

Typewriters
The typewriter was the first personal printing machine. It's efficient, but you're generally limited to one font and one type size.

Computers and dot-matrix printers
Some early computer printers were fast, but their low-resolution characters, which were formed by large dots, weren't ideal for many business communications.

Laser printers
The introduction of the innovative Apple LaserWriter® printer in 1985 made high-resolution type available to Macintosh users for the first time. Laser-printer type is now a standard for business communications.

# TrueType in Action

### Characters as Outlines

The letters, numbers, and punctuation marks of a TrueType font are defined and stored as outlines. These outlines can be mathematically enlarged or reduced without distortion, providing you with sharp text at any size. As you type, the Macintosh locates the TrueType outlines for the characters and scales them to the size you've specified.

### Characters on Screen

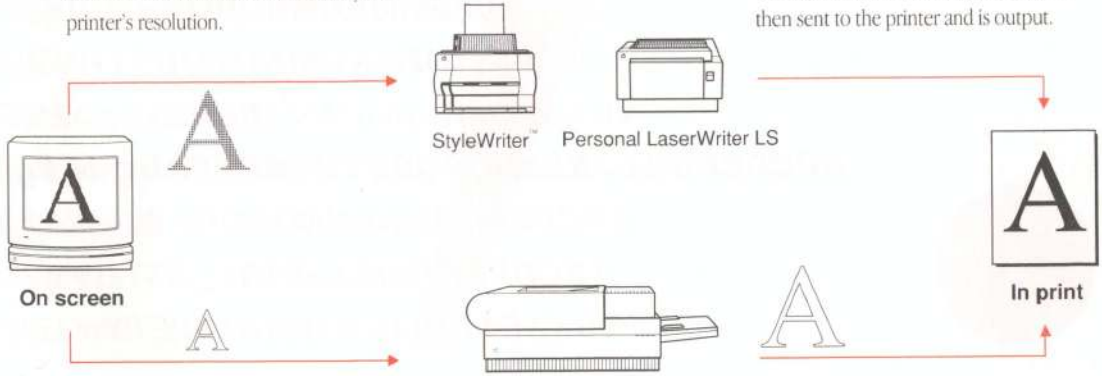
Next, your Macintosh uses the scaled outlines to display the characters on screen. Computer screens are made up of thousands of dots, or pixels. The pixels within the outlines are displayed in black or in color, and the character appears.

### Characters in Print

TrueType outlines are also used by both personal and shared printers. You already know how a Macintosh uses TrueType outlines to display type on screen. Output devices—regardless of their resolution, or whether they print in black and white or in color—use the scaled TrueType outlines to determine where to print on the page.

### Personal Printers

The entire page is first composed by the Macintosh using TrueType outlines. The outlines are filled with dots, or bits. The number of bits used is determined by the printer's resolution.




### Printing

The high-resolution, bit-mapped page is then sent to the printer and is output.

### Shared Printers (PostScript)

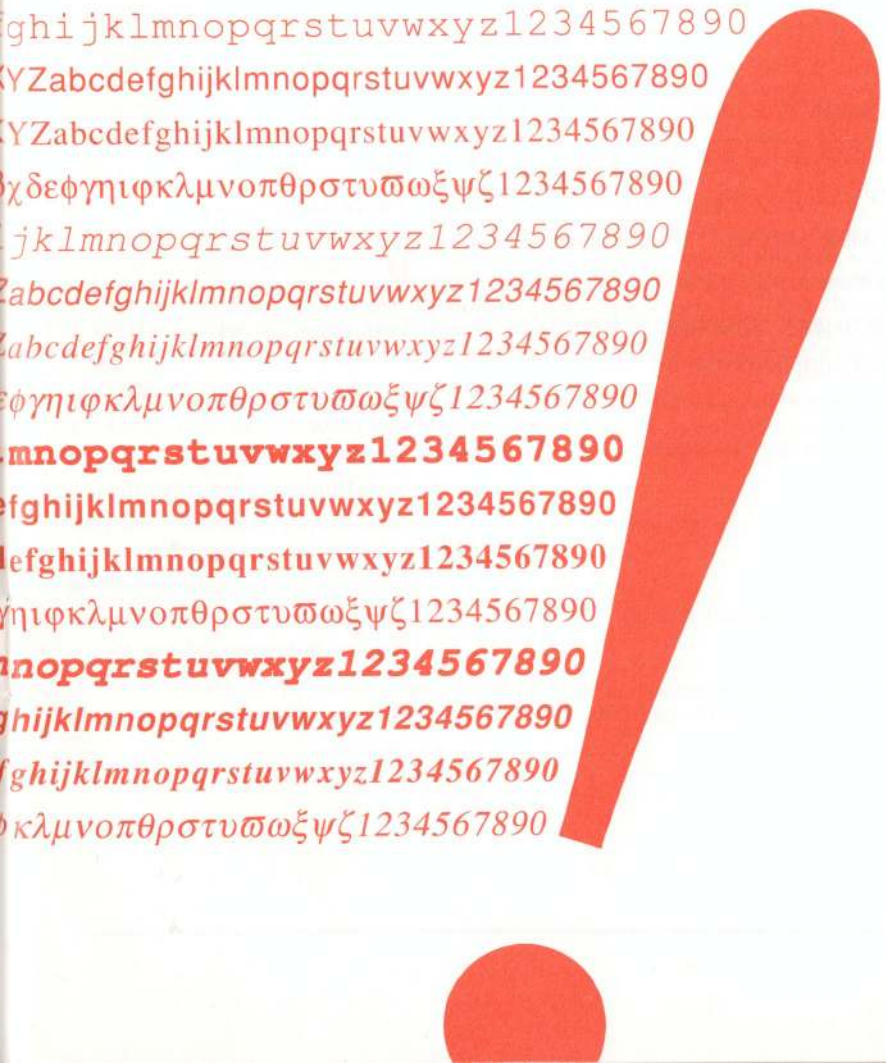
The original, unscaled TrueType outlines, along with scaling instructions, are sent to the printer.

### Printing

The printer scales the TrueType outlines, composes the page in its memory, creates its own bit-mapped page, and then prints.

# Basic Documents

The examples in this section demonstrate just a few of the ways you can use fonts to enhance the appearance and effectiveness of your documents.



# Using TrueType Fonts

TrueType fonts add emphasis and clarity to any printed document, even one as familiar as a business letter.

Take a look at the letter on the right. It's not a complex document. It doesn't use a lot of fonts or font sizes. But its traditional layout and careful use of different styles, such as italic and bold, make its meaning clear. Several styles of a single font (in this case, Times) are used to give the letter organization and emphasis where needed.

Using different fonts adds a visual "voice" to your documents. Your Apple printer comes with Times and Helvetica, two excellent and versatile font families. Times is a "serif" font—serifs are the little additional fourishes at the ends of the letters—and has a traditional look. Helvetica is a "sans serif" ("without serifs") font, and has a clean, modern look. Many types of documents can use both Times and Helvetica to good advantage, as some of the other examples in this brochure demonstrate.

**Business Letter**

This letter was written and formatted using a word processing application.

The Times font family is used throughout the letter. In addition to Times, each printer comes with at least three other font families: Helvetica, Courier, and Symbol. Courier emulates standard typewriter characters. Symbol is a collection of mathematical and scientific characters.

In most word processing applications, each line or paragraph of a document can have its own margin, indentation, alignment, and line spacing settings.

1 This portion of the letter was set in Times bold. Most fonts come with a number of styles, such as italic, bold, and bold italic.

2 Quotation marks and apostrophes were used instead of the inch ( " ) and foot ( ' ) symbols. You can make opening quotation marks by typing Option-[ , closing quotation marks by typing Option-Shift-[ , and apostrophes by typing Option-Shift-]. The Key Caps desk accessory, found under the Apple ( ) menu, can show you how to make these and other special characters and symbols.

3 The word "superior" was set in italics for emphasis.

**Mr. David D. Lambing**
**23119 Beech Street**
**Boston, MA 02130**

March 23, 1991

Ms. Darcy Kendall
Director of Public Relations
FarmBelt Cereals, Inc.
5042 Rye Lane
Des Moines, IA 50340

Dear Ms. Kendall,

I have been a loyal consumer of your company's cereals for a number of years. Though it may sound like a bit of an overstatement, I would like to inform you that during the many years I have been eating FarmBelt Cereals for breakfast (and sometimes for dinner, when I feel so inclined), I have not once been compelled to write about one of your products. Until now.

I have tried the recent addition to your line of breakfast foods, "Yummy Bran," and have found it to be, as the name implies, quite "yummy." But I have found uses for Yummy Bran that go far beyond the breakfast table. I am somewhat of a do-it-yourselfer around the house, and I have tackled many home improvement projects. I couldn't help but notice the resemblance between a bowl of milk-soaked Yummy Bran and common wallpaper paste. So I decided to conduct an experiment. In a head-to-head competition, your cereal proved to be more cost effective than the leading brand of wallpaper paste, and its adhesive qualities were far *superior* to those of the paste.

I am absolutely delighted with your product and am eagerly anticipating any further additions you might make to the FarmBelt line. If I may be so bold, I would like to suggest that you consider something in the line of spackling or pipe sealants. Meanwhile, I will continue to buy, eat, and hang Yummy Bran.

Sincerely,

David D. Lambing

P.S. For the record, I use skim milk on my cereal. You might want to emphasize skim milk on the package, because whole milk produces a decidedly less-effective adhesive.

# Mixing Fonts

You spend a lot of time organizing your thoughts before you commit them to paper. You can give any document an equally organized appearance by combining two distinct yet complementary font families, such as Times and Helvetica.

In the business letter example on the previous page, a single font was used throughout the document. Visual cues were provided by setting type in different styles, such as bold and italic. Resumés are even more structured than business letters. You could easily design a resumé with a single font, but mixing two different fonts really helps you highlight important parts of the document.

**Resumé**

This resumé was written and formatted using a word processing application.

In addition to mixing fonts and styles, this document uses different sizes to emphasize important information.

A resumé is usually divided into different sections. In this example, a line of periods, each separated by a single space, makes a nice visual break between sections.

Though it may not look like it, this resumé has only one column of text. The first line of each paragraph, which includes both the date and the school name or position, has been formatted with a hanging indent. A hanging indent moves the first line of the paragraph to the left margin.

The accent mark in "resumé" is produced by typing Option-e, followed by the vowel.

1. The sans serif font Helvetica bold was reserved for section heads, school names, and job positions.

2. Times, a serif font, was used for the dates and descriptions.

**WILLIAM B. HOFFMAN**
P.O. Box 4071
Stanford, California 94305

## EDUCATION

9/87–present
**STANFORD UNIVERSITY**
**Stanford, California**
Majoring in history. Coursework has included European, Chinese, and American history; drawing and painting; modern art history; English and American literature; and extensive coursework in chemistry, physics, and mathematics.

8/86–7/87
**AARGAUISHE KANTONSCHULE (Aargauer State School)**
**Aarau, Switzerland**
Enrolled in the mathematics/natural sciences track for college-bound students at this Swiss public school. Studied physics, chemistry, mathematics, European history, and fine art.

9/85–6/86
**UNIVERSITY OF MICHIGAN--DEARBORN**
**Dearborn, Michigan**
Took advanced, college-level classes in calculus and physics.

## EXPERIENCE

9/90–present
**TEACHING ASSISTANT**
**Computer Science 001C—Using the Macintosh**
**Stanford University**
Member of student team that independently created a one-unit Macintosh class for the Computer Science department. Our teaching materials from the class are being rewritten and will be published as a textbook by HiTech Books in the fall.

9/90–present
**RESIDENT ASSISTANT**
**Stanford University**
University representative in 400-student undergraduate dormitory. Responsible for planning educational and social events, as well as providing peer counseling for residents.

9/88–9/90
**EDITOR/ART DIRECTOR**
**The Stanford *Sagebrush***
**Stanford University**
Directed the writing, design, and publishing of full-color, student-run quarterly journal of opinion and current events. Also directed the changeover of *Sagebrush* production to Macintosh-based publishing solutions.

6/88–9/88
**PRODUCTION ARTIST**
***Arabian Horse Universe* magazine**
Chief production artist for 300- to 600-page, full-color monthly magazine. Became familiar with high-quality color printing processes. (All *Arabian Horse Universe* production, from typesetting to plate making, is done in house and relies heavily on a Macintosh-based system.)

## ADDITIONAL INFORMATION

6/90–9/90
**RESEARCH INTERN**
**The Museum of American Technology**
**Dearborn, Michigan**
Researched and wrote project manual and history of the Museum's 1805 cooper shop (located in 200-acre outdoor building collection). As a result of this research, the cooper shop was renovated and turned into an operating demonstration for museum visitors.

# Fonts and Numbers

You've seen how you can use different fonts to make written documents easier to understand. You can also use fonts to help organize the data in complex documents, such as spreadsheets, so they are more effective.

The information contained in spreadsheets is often vital to the efficient operation of a business. That's why there's an even greater need to apply different fonts and styles to columns and pages of numbers. You want to make sure that people can tell which numbers are most important. The combination of Times and Helvetica is excellent for organizing numerical information.

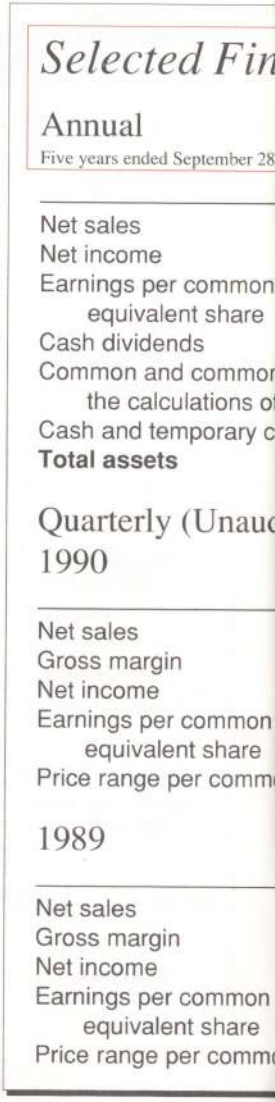
**Spreadsheet**

This document was created using a spreadsheet application and then imported into a word processing application.

The alignment of the dollar signs and the dollar amounts was achieved using tabs. The dollar signs are aligned at left tab stops, and all the figures are aligned at right tab stops. Most word processors also provide center and decimal tabs. Decimal tabs let you line up numerical data along decimal points.

1 Different sizes and styles of Times were used for section headings.

2 Helvetica was used for the data. In the annual financial information section, totals are in Helvetica bold to set them off from the rest of the data.



*Selected Fin*

Annual

Five years ended September 28

Net sales
Net income
Earnings per common
equivalent share
Cash dividends
Common and commor
the calculations o
Cash and temporary c
**Total assets**

Quarterly (Unauc
1990

Net sales
Gross margin
Net income
Earnings per common
equivalent share
Price range per comm

1989

Net sales
Gross margin
Net income
Earnings per common
equivalent share
Price range per comm

## ancial Information

1990

| | 1990 | 1989 | 1988 | 1987 | 1986 |
|---|---|---|---|---|---|
| | $ 2,661,068 | $ 1,901,898 | $ 1,918,280 | $ 1,515,876 | $ 982,769 |
| | $ 217,496 | $ 153,963 | $ 61,223 | $ 64,055 | $ 76,714 |
| nd common | | | | | |
| | $ 1.65 | $ 1.20 | $ .49 | $ .53 | $ .64 |
| | $ .12 | $ — | $ — | $ — | $ — |
| equivalent shares used in | | | | | |
| earnings per share | 131,615 | 128,630 | 123,790 | 121,774 | 119,734 |
| sh investments | $ 565,094 | $ 576,215 | $ 337,013 | $ 114,888 | $ 143,284 |
| | **$ 1,477,931** | **$ 1,160,128** | **$ 936,177** | **$ 788,786** | **$ 556,579** |

ted)

| | Fourth Qtr. | Third Qtr. | Second Qtr. | First Qtr. |
|---|---|---|---|---|
| | $ 786,424 | $ 637,064 | $ 575,327 | $ 662,253 |
| | $ 406,823 | $ 327,211 | $ 287,844 | $ 342,970 |
| | $ 71,678 | $ 53,479 | $ 33,866 | $ 58,473 |
| nd common | | | | |
| | $ .54 | $ .40 | $ .26 | $ .45 |
| n share | $ 57 1/2–$37 1/4 | $ 42–$31 1/4 | $ 35–$20 1/4 | $ 21 7/8–$16 1/4 |
| | $ 510,786 | $ 448,279 | $ 408,943 | $ 533,890 |
| | $ 272,463 | $ 236,032 | $ 231,360 | $ 270,931 |
| | $ 32,893 | $ 32,333 | $ 31,812 | $ 56,925 |
| nd common | | | | |
| | $ .25 | $ .25 | $ .25 | $ .45 |
| n share | $ 18 7/8–$15 1/4 | $ 19 7/16–$13 3/8 | $ 14 1/8–$11 | $ 11 3/16–$7 1/2 |

# Great Type at Any Size

How do you shout in print? You choose your words carefully, and make them big. You use larger type sizes to draw attention to what you think is important.

This flyer applies an obvious type treatment to a familiar phrase. The letters increase in size, culminating with the key word "grow." The font families are Times and Helvetica. Compare the look of the headline with that of the copy underneath. Notice how Times has a substantially different, almost monumental, look when it's used at a large size.

In the previous document examples, most of the type was no more than 10 or 12 points in size. (A "point" is the unit of measurement for type size. There are 72 points to an inch.) Here, the largest Times characters in the headline are 120 points tall. The large Helvetica characters at the bottom of the page are 30 points tall. This flyer demonstrates the ability of TrueType to produce great type at any size.

**Flyer**

This flyer was created using a graphics application that supports kerning, a type function that lets you control the distances between individual characters.

The headline was set in Times. The name of the store at the bottom of the page was set in Helvetica bold.

❶ The letters for the headline are reversed, which means they're white instead of black. The background is a square that was created in a graphics application and then placed behind the type.

❷ The question mark and the letter "w" in the headline have been tightly kerned to make the last line fit inside the background. The tight spacing also eliminates a gap that would have appeared next to the "w" and underneath the curve of the question mark.

# How does your garden grow?

Whether you're plotting your own little paradise on earth or just growing tomatoes in a bucket, you'll find everything you need at Terra Firma Garden Supply Stores. Our knowledgeable sales staff will help you choose from the widest selection of seedlings, gardening tools, and organic fertilizer in the state. And our dirt-cheap prices guarantee that you'll get the most for your gardening dollars.

## Terra Firma Garden Supply Stores

**San Francisco, Walnut Creek, Palo Alto**

aaa

ZZZ

Section 3

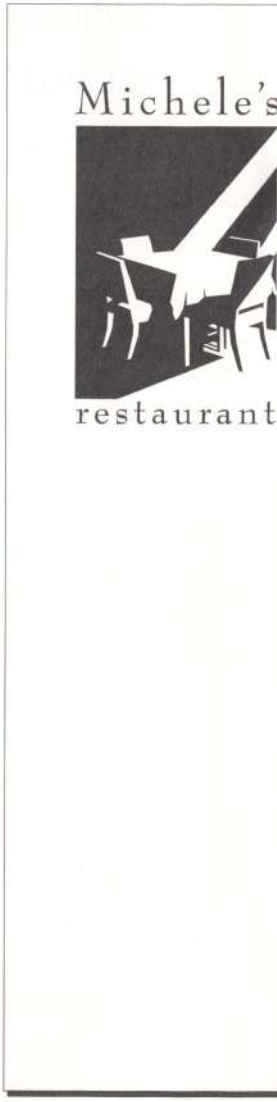
# Beyond the Basics

Additional fonts, custom illustrations, and scanned graphics can add further impact to your documents.

# Building a Type Library

Adding fonts to your software library lets you customize your work. You can reinforce and raise consumer awareness of your company and its products and services by consistently using a particular font family in presentations, brochures, advertising, and other marketing materials. In other words, an additional font family or two can be a sound business investment.

Before choosing any new fonts, make sure that they complement those in your existing library. For example, look at the fonts used in this brochure. The sans serif headlines are set in Helvetica, and the text is set in a condensed Garamond. Using Helvetica and Garamond together gives the page a look that's quite different from the combination of Helvetica and Times.




**Presentations**
This overhead transparency was designed using a presentation application. The logo was created using a graphics application.

The logo was made by drawing irregularly shaped black polygons. This logo could be used on business letters, menus, ads, or any other documents, and could then be output on an Apple printer.

1. The font in this example is Bernhard Modern from Bitstream Inc. Bernhard Modern is a serif font, like Times, and it has an elegant, sophisticated look. Without even seeing a menu, you already know something about the restaurant from the font and logo.

2. You can make a bullet point in almost any font by typing Option-8.

## Michele's Restaurant Expansion Plans

### Basic Considerations

- Must add 2,000 square feet of seating area.
- Kitchen requires new range and dishwashing equipment.
- Expand lounge and bar space.
- Remodel existing location, or move?

# Scanned Graphics

The best way to communicate an idea is often with a picture. It's easy to create exactly the right pictures and graphics with a Macintosh, especially if you use a scanner.

Catalogs, for example, usually require lots of pictures. But creating the graphics for an entire catalog using traditional methods could be a tremendous undertaking. A scanner can make the process easier. You can take pictures of the items for sale, scan the photographs, and then use the Macintosh to combine the scans with the catalog text.

Scanners have a wide range of capabilities and functions. Some scan only in black and white, others in color. Some scanning applications can convert printed text into a word processing document. Once you've made a scan, you can make further modifications by using an appropriate graphics application.

**Catalog**

This page was written and formatted (including placement of graphics) using a word processing application.

The font used throughout the document is Monotype Perpetua.

❶ The logo of the working tinsmith is an eighteenth-century woodcut that was scanned, imported into a graphics application, and then traced using irregularly shaped polygons.

❷ The tinware graphics were made using an Apple Scanner and 35mm color prints. After the prints were scanned, background images in the scans were erased using a graphics application.

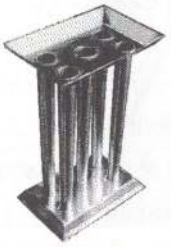
❸ The lines are not imported graphics; instead, each line is part of the defined format of the paragraph under the line. Some word processing applications will allow you to define an accompanying line at the same time you set the paragraph's alignment, indentation, or page position.

### *Shaker Teapot* $35

This is an accurate reproduction of a small teapot from David Andrew's extensive collection of Shaker tin and ironwork. The teapot is 6½ inches tall, 4¾ inches wide at the base, and holds approximately four cups.

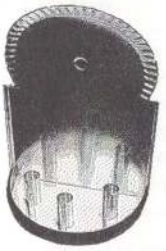
### *Candle Mold* $60

This traditionally styled candle mold is perfect for making beeswax candles. The standard mold has four tubes, but you can order up to six tubes (please add $10 per tube). The mold is 15 inches tall, 3¾ inches wide, and 3¾ to 5¼ inches long.



### *Wall Sconce* $25

Sconces come in a variety of sizes and shapes. This is a reproduction of an early eighteenth-century sconce that still graces the wall of the 1775 Croft's Tavern in Bearfield, Massachusetts. The sconce is 12 inches tall and 9 inches wide at the base.



### *Pierced Lantern* $75

A pierced tin lantern in the Hadley Falls Museum provided both the design and dimensions for this reproduction. The lantern is 13 inches tall, 5 inches wide, and has a 4-inch-diameter handle. A single candle socket is accessed by unlatching the hinged door. Please write for more details concerning personalized lanterns.

# Page-Layout Applications

With a Macintosh, you can write, design, and produce an entire newsletter in house. If you need professional-quality output, you can take your newsletter to a service bureau to have it output on typesetting equipment.

Complex documents are often easier to put together using a page-layout application. Page-layout applications pick up where sophisticated word processors leave off, providing extensive type and graphics controls.

TrueType fonts are a vital part of page design. Page-layout applications let you work on your document on screen in a number of sizes, from thumbnails to 400 percent enlargements. TrueType fonts look great on screen no matter what size your document is, allowing you to make accurate decisions about type size and position.

**Newsletter**

This newsletter, like this brochure, was created entirely on a Macintosh computer using a page-layout application.

Monotype Gill Sans was used for the headlines, and Monotype Joanna was used for the body copy. Monotype Centaur was used in the masthead.

The newsletter has a rather traditional three-column format. It could have been designed with more or fewer columns, or with columns of unequal width.

The map was created using a graphics application. Monotype Gill Sans was used for labels and numbers.

❶ Above the masthead is a high-resolution, black-and-white scanned image of a tree. The original drawing is from a book of copyright-free, nineteenth-century engravings.

❷ The large "O" at the beginning of the body copy is known as a drop cap. In some page-layout applications, you can define the size of a drop cap in the same way that you define other paragraph parameters.

❸ The leaf graphic is a scan of an actual leaf. The text wrap around the contour of the leaf is an automatic, adjustable feature of most page-layout applications.

# LEYLAND ARBORETUM

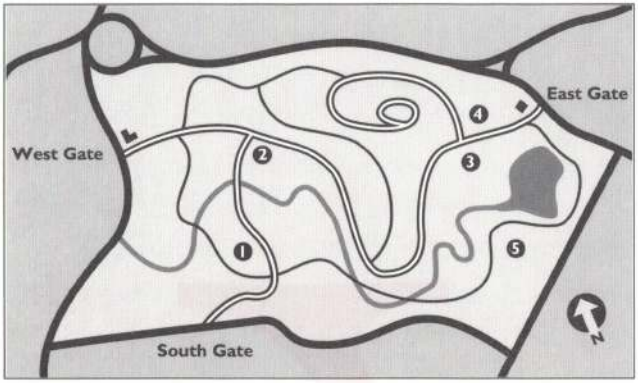
NEWS FOR FRIENDS AND SUPPORTERS SUMMER 1991

## Arboretum Adds New Trees From Japan and Norway

On May 21, the Leyland Arboretum held a day-long celebration to officially dedicate the latest additions to its extensive collection of trees, shrubs, and flowers. The event, which drew a record crowd of 7,500 visitors, featured guided nature walks, folk music, food, wine tasting, and great spring weather. Arboretum Director Dr. Sue Markey called the festivities "almost as good as Christmas!"

The latest specimens to grace the Arboretum grounds include a dozen varieties of lilac from eastern Europe, a rare species of water lily, and four additions to the Carl Stone Commemorative Rose Garden. The Dubberly Bonsai Collection located in the West Gate Visitor Center gained three ancient and fine examples of this living artform.

But the real attraction consisted of five full-grown trees the Arboretum staff planted during the preceding week.




*Dots signify recent additions to the Arboretum: (1) a Japanese Zelkova; (2) a Norway Maple; (3) an American Sassafras; (4) a Red Oak; and (5) a Red Maple.*

Zelkova serrata

Of the five trees, two are not native to North America: a Japanese Zelkova (*Zelkova serrata*), which is a member of the elm family; and a Norway Maple (*Acer platanoides*). The remaining three trees are a Northern Red Oak (*Rubra maxima*), a Sassafras (*Sassafras albidum*), and a Red Maple (*Acer rubrum*), all native to North America.

"We stuck to specimens from the Northern Hemisphere," said Dr. Markey about the new arrivals. "This is in keeping with the Arboretum's century-old collecting tradition of deferring to our regional climate." She explained how the Arboretum must always consider climate before accepting a specimen from some other ecological niche. "A New England winter's hard enough on

continued on next page

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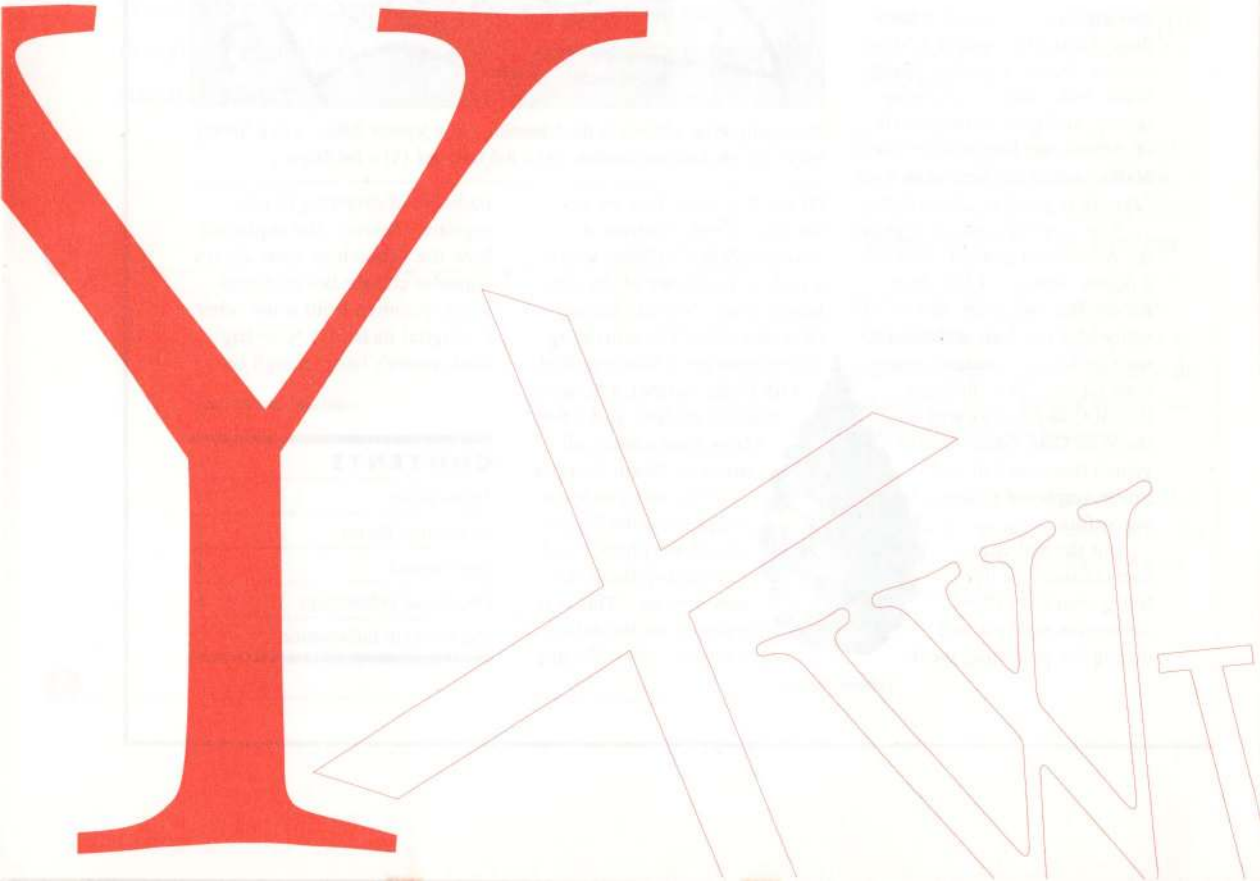
| Membership Information | 7 |



# Adding to Your TrueType Library

Vendors listed in this section offer a wide variety of fonts and associated font applications and utilities.

# Type Vendors

There are many reasons to add fonts to your TrueType library. You may want to use a particular font in your corporate communications. You may need to use a non-Roman alphabet or a special-purpose font in your work. Or you may just want a little variety. Remember, no one font can do everything—that's why there are thousands of fonts to choose from.

TrueType for the Macintosh is just the latest development in the long history of type and type technology. Some of the vendors listed here got their start back in the days of metal type, and they're selling digital type today. And some vendors are newcomers who are designing and selling innovative digital fonts.

As you consider which fonts to add to your TrueType font library, call the vendors listed here to ask for an up-to-date catalog. They're continually adding fonts to their collections to give you the widest possible range of type.

This is only a partial list of Macintosh TrueType vendors. You can find out more about other vendors from your local Apple dealer or from various Macintosh publications.

**Agfa Compugraphic**

Agfa Compugraphic is a leading electronic and photographic prepress company. Agfa Compugraphic develops fonts and font-scaling technologies and markets them around the world.

Agfa's TrueType fonts are available on floppy disk and the AgfaType CD-ROM. The AgfaType CD-ROM is a single compact disc that contains Agfa's vast library of Macintosh fonts and typographically related third-party software applications.

Agfa Corporation
200 Ballardvale Street
Wilmington, MA 01887
1-800-424-TYPE

**Altsys Corporation**

Altsys Corporation provides software solutions for Macintosh graphic artists, designers, typographers, and publishers. The Metamorphosis Professional application from Altsys produces TrueType fonts from existing font formats. Metamorphosis Professional and Altsys Fontographer, a font design application, provide a complete TrueType font development environment.

Other effective solutions for type design offered by Altsys include Metamorphosis, FONTastic Plus, and Family Builder.

Altsys Corporation
269 W. Renner Road
Richardson, TX 75080
(214) 680-2060

### Ares Software

FontMonger software from Ares converts existing Macintosh fonts into TrueType fonts. It also allows you to export or import character outlines to and from graphics applications. FontMonger offers a unique range of capabilities, including access to unencoded characters and generation of custom oblique characters, true small capitals, superior and inferior characters, and fractions. Type transformations can be rendered on a single character, multiple characters, or the entire font.

Ares Software
P.O. Box 4667
Foster City, CA 94404
(415) 578-9090

### Bitstream Inc.

Bitstream is an independent type foundry dedicated solely to creating digital type products. This focus enables Bitstream to develop the highest-quality type solutions, regardless of format, device, or platform.

The Bitstream font library is known for the authenticity of its type designs, complete type families, and extensive kerning data. Bitstream offers a number of TrueType font solutions, including TrueType Variety Packs that contain a mix of text and decorative headline fonts.

Bitstream Inc.
215 First Street
Cambridge, MA 02142-1270
1-800-237-3335

### Kingsley/ATF

Kingsley/ATF offers its entire digital font library in TrueType format. Each font package includes the TrueType outline, kerning and metrics data, and selected bit maps.

For people who would like to design their own fonts, Kingsley/ATF offers ATF Type Designer I, a fully integrated type design system that supports standard font formats.

Kingsley/ATF Type Corporation
2559-2 E. Broadway
Tucson, AZ 85716
1-800-289-8973

### Letraset

Letraset's FontStudio 2.0 is a font-creation and editing program that allows users to create and edit TrueType fonts and other Macintosh font formats. FontStudio 2.0 offers a rich array of drawing and enhancement tools, and allows users to interpolate a font from two contrasting font weights. The application has the ability to add autohinting of character outlines and additional manual hints. FontStudio 2.0 also allows users to convert their existing type libraries to TrueType.

Letraset
40 Eisenhower Drive
Paramus, NJ 07653
1-800-343-TYPE

### Linotype

Exacting standards of technology and aesthetic values are the principles that Linotype has applied to all its typesetting products since the company was founded in 1886.

The Linotype Library, which contains more than 2,000 fonts, includes such well-known fonts as Adrian Frutiger's Univers, Glypha, Meridien, and Frutiger, as well as Herman Zapf's Optima, Melior, and Palatino.® Many Linotype fonts are available in the TrueType format.

Linotype Company
425 Oser Avenue
Hauppauge, NY 11788
(516) 434-2684

### Monotype

The Monotype Typeface Library is one of the finest and most comprehensive font collections in the world. In addition to Times New Roman, the original font designed by Monotype for the *Times of London* in 1931, the collection includes such popular and well-known fonts as Bembo, Gill Sans, Plantin, and Rockwell.

As of early 1991, Monotype has more than 100 fonts available in the TrueType format. More than 250 TrueType-format fonts will be available from Monotype by June 1991.

Monotype Typography, Inc.
53 West Jackson Boulevard, Suite 504
Chicago, IL 60604
1-800-666-6897

## The Apple Publishing System

This Apple™ manual was written, edited, and composed on a desktop publishing system using Apple Macintosh™ computers and Microsoft Word. Line art and chapter openers were created using Adobe Illustrator 88.

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